Refine Search

Search Results -

Terms	Documents
L7 and basic metal$3	0

Database: US Pre-Grant Publication Full-Text Database; US Patents Full-Text Database; US OCR Full-Text Database; EPO Abstracts Database; JPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L8

Refine Search | Recall Text | Clear | Interrupt

Search History

DATE: Friday, April 23, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L8	L7 and basic metal$3	0	L8
L7	L5 and terephthal$6	1	L7
L6	L5 and terephthalat$2	0	L6
L5	monomer and 1$13$1 propanediol	10	L5
L4	depolymer$6 ppt	0	L4
L3	depolymer$6 poly$1trimethylene$1 terephthalate	1	L3
L2	depolymer$6 poly$1propylene$1 terephthalate	0	L2
L1	depolymer$6 polypropylene terephthalate	0	L1

END OF SEARCH HISTORY

Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 3402147 A

Using default format because multiple data bases are involved.

L7: Entry 1 of 1 File: USOC Sep 17, 1968

US-PAT-NO: 3402147
DOCUMENT-IDENTIFIER: US 3402147 A

TITLE: Process for preparing polyester resins from a telomer

DATE-ISSUED: September 17, 1968

INVENTOR-NAME: WERNER STARCK; WILHELM LAMPE ; HELMUT RINNO ; JAKOB WINTER

US-CL-CURRENT: 528/296, 525/176, 528/301, 528/303

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents
L5 and terephthal$6	1

Display Format: - Change Format

Previous Page Next Page Go to Doc#

Structure attributes must be viewed using STN Express query preparation.

=> s l2 full
FULL SEARCH INITIATED 09:38:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 29.3% PROCESSED 400000 ITERATIONS 285 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.08

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: EXCEEDS 1000000
PROJECTED ANSWERS: EXCEEDS 881

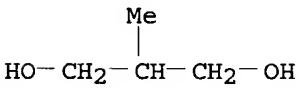
L4 285 SEA SSS FUL L2

=> d

L4 ANSWER 1 OF 285 REGISTRY COPYRIGHT 2004 ACS on STN
RN 661474-13-1 REGISTRY
CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, formaldehyde, 2-methyl-1,3-propanediol, 1,3-propanediol and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)
MF (C8 H6 O4 . C5 H12 O2 . C4 H10 O2 . C3 H8 O2 . C3 H6 N6 . C H2 O)x
CI PMS
PCT Amino resin, Polyamide, Polyamide formed, Polyester, Polyester formed
SR CA
LC STN Files: CA, CAPLUS

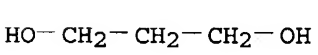
CM 1

CRN 2163-42-0
CMF C4 H10 O2



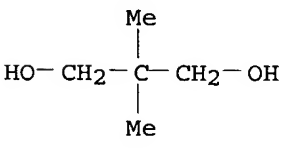
CM 2

CRN 504-63-2
CMF C3 H8 O2



CM 3

CRN 126-30-7
CMF C5 H12 O2



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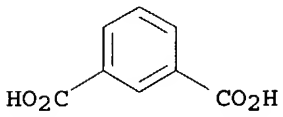
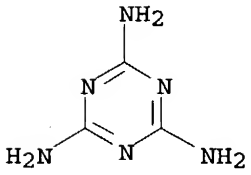
CRN 121-91-5
CMF C8 H6 O4



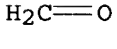
CM 5

CRN 108-78-1
CMF C3 H6 N6



CM 6

CRN 50-00-0
CMF C H2 O



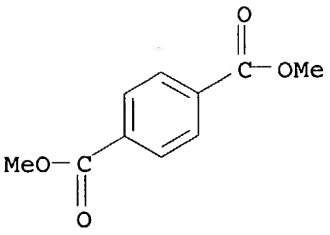
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s dimethyl terephthalate/cn
L5 1 DIMETHYL TEREPHTHALATE/CN

=> d

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 120-61-6 REGISTRY
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Terephthalic acid, dimethyl ester (6CI, 7CI, 8CI)
OTHER NAMES:
CN Dimethyl 1,4-benzenedicarboxylate
CN Dimethyl p-benzenedicarboxylate
CN Dimethyl p-phthalate
CN **Dimethyl terephthalate**
CN DMT
CN Methyl 4-(carbomethoxy)benzoate
CN Methyl p-(methoxycarbonyl)benzoate
CN NSC 3503
FS 3D CONCORD
DR 63143-14-6, 202644-54-0
MF C10 H10 O4
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, HODOC*, HSDB*, IPA, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3193 REFERENCES IN FILE CA (1907 TO DATE)
419 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3194 REFERENCES IN FILE CAPLUS (1907 TO DATE)
194 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	170.76	171.41

FILE 'CAPLUS' ENTERED AT 09:40:11 ON 23 APR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 23 Apr 2004 VOL 140 ISS 18
FILE LAST UPDATED: 22 Apr 2004 (20040422/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 504-63-2/prep
          4386 504-63-2
       3138400 PREP/RL
L6          420 504-63-2/PREP
                (504-63-2 (L) PREP/RL)

=> s 504-63-2/proc
          4386 504-63-2
       3480047 PROC/RL
L7          282 504-63-2/PROC
                (504-63-2 (L) PROC/RL)

=> s l6 or l7
L8          682 L6 OR L7

=> s 120-61-6/prep
          3197 120-61-6
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      3138400 PREP/RL
L9          979 120-61-6/PREP
                (120-61-6 (L) PREP/RL)

=> s 120-61-6/proc
          3197 120-61-6
       3480047 PROC/RL
L10         168 120-61-6/PROC
                (120-61-6 (L) PROC/RL)

=> s l9 or l10
L11        1112 L9 OR L10

=> s l8 or l11
L12        1787 L8 OR L11

=> s depolymer? and l12
          10687 DEPOLYMER?
L13          68 DEPOLYMER? AND L12

=> s depolymer? and l12 and basic
          10687 DEPOLYMER?
         343428 BASIC
L14           1 DEPOLYMER? AND L12 AND BASIC

=> s depolymer? and l12 and basic and monomer
          10687 DEPOLYMER?
         343428 BASIC
         162471 MONOMER
L15           1 DEPOLYMER? AND L12 AND BASIC AND MONOMER

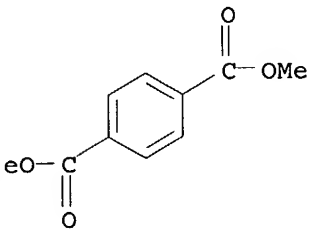
=> d ibib abs hitstr

L15  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2001:208222  CAPLUS
DOCUMENT NUMBER:          134:223143
TITLE:                    Preparation of ester-forming monomers by decomposition
                          of poly(trimethylene terephthalate)
INVENTOR(S):              Kato, Jinichiro; Fujimoto, Katsuhiro
PATENT ASSIGNEE(S):       Asahi Kasei Kabushiki Kaisha, Japan
SOURCE:                   PCT Int. Appl., 26 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2001019764      A1   20010322       WO 2000-JP6289   20000913
         W:  JP, US
PRIORITY APPLN. INFO.:                   JP 1999-258509   A  19990913
AB   The ester-forming monomer with acrolein content ≤0.5% is
     obtained by reacting poly(trimethylene terephthalate) with at least one
     member selected among monohydric alcs., 1,3-propanediol, and water in the
     presence of a basic substance.  The ester-forming
     monomer recovered can be used to produce therefrom a polymer for
     molding fibers, films, and other articles which is equal or superior in
     quality to polymers produced from the corresponding virgin monomer
     .  Thus, poly(trimethylene terephthalate) 144, 1,3-propanediol 255, and
     sodium acetate 0.144 g were heated at 210° for 60 min and
     1,3-propanediol was removed to give bis(3-hydroxypropyl) terephthalate
     with conversion rate about 100%, 130 g of which was mixed with 224 g
     methanol and 25.3 g sodium carbonate, heated at 65° for 30 min, and
     separated to a liquid phase and a solid phase giving 1,3-propanediol with
     recovery rate 87%, acrolein content 0.02%, and reduced coloration and
     di-Me terephthalate with acrolein content 0% and no coloration.
IT   120-61-6P, Dimethyl terephthalate 504-63-2P,
     1,3-Propanediol
```

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); RCT (Reactant); **PREP (Preparation)**; **PROC (Process)**; RACT (Reactant or reagent)
(preparation of ester-forming monomers by decomposition of poly(trimethylene terephthalate))

N 120-61-6 CAPLUS
N 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



N 504-63-2 CAPLUS
N 1,3-Propanediol (8CI, 9CI) (CA INDEX NAME)

HO—CH_2—CH_2—CH_2—OH

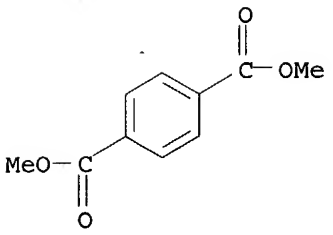
EFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l13 and monomer
162471 MONOMER
L16 23 L13 AND MONOMER

=> s l16 and py<1999
18918778 PY<1999
L17 10 L16 AND PY<1999

=> d 1-10 ibib abs hitstr

L17 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:769472 CAPLUS
DOCUMENT NUMBER: 130:125907
TITLE: Chemical recycling of PET bottles to **monomer**
AUTHOR(S): Inada, Shuji
CORPORATE SOURCE: Sales Department, AIES Co., Ltd., Osaka-shi, Sadagawa-ku, Nishinakajima, 532-0011, Japan
SOURCE: Kogyo Zairyo (**1998**), 46(11), 81-85
CODEN: KZAIA5; ISSN: 0452-2834
PUBLISHER: Nikkan Kogyo Shinbunsha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
AB A review with no reference on the APORES recycling of waste PET bottles to terephthalic acid, di-Me terephthalate, and bis-β-hydroxyethyl terephthalate.
IT **120-61-6P**, Dimethyl terephthalate
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(chemical recycling of PET bottles to **monomer**)
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:105847 CAPLUS
DOCUMENT NUMBER: 128:115362
TITLE: **Monomer** recovery process from contaminated polymers
INVENTOR(S): Gallagher, Francis Glenn
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: U.S., 12 pp., Cont.-in-part of U.S. 5,532,404.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

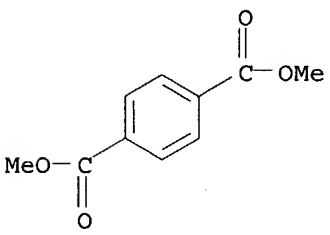
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5710315	A	19980120	US 1996-668760	19960624 <--
US 5532404	A	19960702	US 1994-250391	19940527 <--
CA 2257230	AA	19971231	CA 1996-2257230	19960701 <--
WO 9749652	A1	19971231	WO 1996-US11196	19960701 <--
W: CA, CN, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 912468	A1	19990506	EP 1996-923598	19960701
EP 912468	B1	20030326		
R: BE, DE, FR, GB, IT, NL				
JP 2002507187	T2	20020305	JP 1998-502885	19960701
KR 2000022142	A	20000425	KR 1998-710558	19981223

PRIORITY APPLN. INFO.: US 1994-250391 A2 19940527
US 1996-668760 A 19960624
WO 1996-US11196 W 19960701

AB An improved process for recovering depolymn. products from polymers, such as polyesters (e.g., PET), polyamides, and polyesteramides, especially when the starting polymer content is less than about 98%, is presented, wherein the depolymn. and vapor-phase recovery of monomers (e.g., di-Me terephthalate) and other reaction products are conducted in the presence of a solid support (e.g., glass).

IT **120-61-6P**, Dimethyl terephthalate
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(**monomer** recovery process from contaminated polymers)

RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:527789 CAPLUS

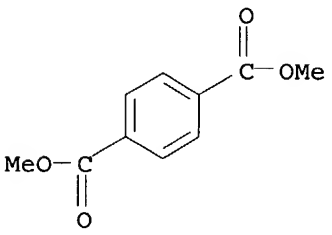
DOCUMENT NUMBER: 127:161596
TITLE: Apparatus for the **depolymerization** recovery of components from polyester resins using a scraped-wall heat exchanger
INVENTOR(S): Naujokas, Andrius Algimantas; Gamble, William James
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5654470	A	19970805	US 1996-687819	19960726 <--

PRIORITY APPLN. INFO.: US 1996-687819 19960726
OTHER SOURCE(S): CASREACT 127:161596

AB The depolymn. of polyethylene terephthalate using superheated MeOH into component monomers (e.g., di-Me terephthalate) at ambient pressure is described using a novel apparatus **Monomer** solids that deposit during cooling, as part of the recovery operation, are removed using a scraped-wall heat exchanger. An apparatus schematic is presented.

IT **120-61-6P**
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(apparatus for the depolymn. recovery of components from polyester resins using a scraped-wall heat exchanger)
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:253795 CAPLUS
DOCUMENT NUMBER: 126:239355
TITLE: Recovery of components from polyester resins
INVENTOR(S): Gamble, William James; Naujokas, Andrius
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

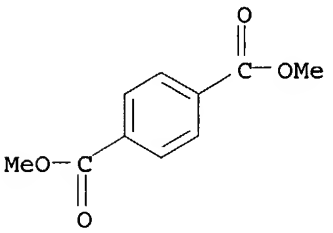
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 758640	A1	19970219	EP 1996-202118	19960725 <--
EP 758640	B1	19991222		
R: DE, FR, GB				
US 5576456	A	19961119	US 1996-589444	19960122 <--

PRIORITY APPLN. INFO.: US 1995-2162P P 19950811
US 1996-589444 A 19960122

AB A process for the depolymn. of polyethylene terephthalate (PET) into component monomers uses a reactor in which the PET is a discontinuous phase which contacts a continuous phase of superheated methanol vapor.

IT **120-61-6P**, Dimethyl terephthalate
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); **PREP (Preparation)**; **PROC (Process)**

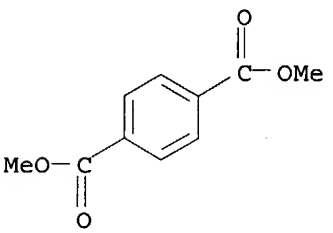
(recovery of **monomer** components from polyesters by depolymn. with superheated methanol vapor)
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:719045 CAPLUS
DOCUMENT NUMBER: 126:48125
TITLE: Recovery of components from polyester resins
INVENTOR(S): Gamble, William J.; Naujokas, Andrius A.
PATENT ASSIGNEE(S): Eastman Kodak Company, USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5576456	A	19961119	US 1996-589444	19960122 <--
EP 758640	A1	19970219	EP 1996-202118	19960725 <--
EP 758640	B1	19991222		
R: DE, FR, GB				
JP 09118639	A2	19970506	JP 1996-237114	19960805 <--

PRIORITY APPLN. INFO.: US 1995-2162P P 19950811
US 1996-589444 A 19960122
AB A process for the depolymn. of poly(ethylene terephthalate) into component monomers uses a reactor in which the poly(ethylene terephthalate) is a discontinuous phase which contacts a continuous phase of superheated MeOH vapor.
IT **120-61-6P**, Dimethyl terephthalate
RL: PNU (Preparation, unclassified); **PREP (Preparation)**
(recovery of **monomer** components from polyester resins)
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:452808 CAPLUS
DOCUMENT NUMBER: 125:144496
TITLE: Recovery of monomers and volatile reaction products from polyester and polyamide waste
INVENTOR(S): Gallagher, Francis G.
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: U.S., 10 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

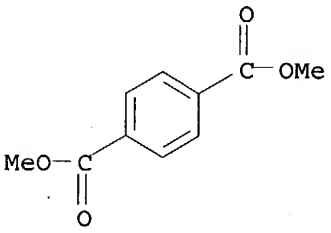
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5532404	A	19960702	US 1994-250391	19940527 <--
US 5710315	A	19980120	US 1996-668760	19960624 <--
CN 1222132	A	19990707	CN 1996-180351	19960701
CN 1083409	B	20020424		

PRIORITY APPLN. INFO.: US 1994-250391 A2 19940527

AB An improved process for recovering reaction products from polymers such as polyesters or polyamides, especially those having a desired polymer level below about 98%, includes (1) depolymg. the polymer to give volatile reaction products, (2) vapor-phase stripping the volatile reaction products to give a stripping agent/product distillate, and (3) recovering the reaction products from said distillate while leaving non-volatile residue material with the support material. Wherein the said depolymn. and vapor-phase stripping is carried out in the presence of a solid support that comprises .apprx.5-99% by weight of the reaction mass, and the solid support is solid under the conditions of (1) and (2) such that a suspended bed is formed and the quantity and rate of recovery of reaction products is enhanced over that obtained in the absence of said solid support. The process is useful in recovering monomers and reaction products from contaminated polyesters and polyamides, especially post-consumer waste. Thus, Crystar 1934 (PET) was depolymd. in the presence of insulation glass fibers using MeOH as the depolymg. and stripping agent to give 157 g residue and 55% polymer conversion. The introduction of glass fibers increased the conversion of PET to volatile monomers compared to depolymn. in the absence of glass fibers.

IT **120-61-6P**, Dimethyl terephthalate
RL: PUR (Purification or recovery); **PREP (Preparation)**
(**monomer** and volatile reaction product recovery from polyester and polyamide waste by depolymn. in presence of a solid support)

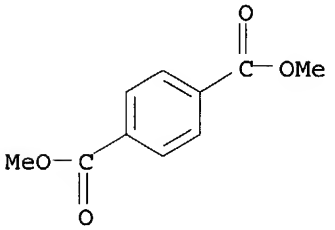
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:248993 CAPLUS
DOCUMENT NUMBER: 124:290550
TITLE: Process for recovery of aromatic acid or ester and polyol from waste polyester resins
INVENTOR(S): Bartos, Thomas M.; Rosen, Bruce I.; Rosenfeld, Jeffrey I.
PATENT ASSIGNEE(S): Amoco Corporation, USA
SOURCE: U.S., 12 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 5502247 A 19960326 US 1994-341012 19941117 <--
EP 712832 A1 19960522 EP 1995-308250 19951117 <--
R: BE, CH, DE, ES, FR, GB, IT, LI, NL
PRIORITY APPLN. INFO.: US 1994-341012 19941117
AB The process for recovery and purification of dibasic aromatic acids or esters thereof from waste polyester film, fiber, bottles, etc., comprises (a) depolymn. of polyester resin in a liquid solvent under conditions of elevated temperature and pressure to form a solution of dibasic aromatic acid or ester, polyol, organic impurities, and other components of the resin; (b) crystallization of the dibasic aromatic acid or ester from the solution by flash crystallization to form a vapor containing a major amount of the polyol and solvent, and a slurry of dibasic aromatic acid or ester crystals in mother liquor; (c) separation of crude dibasic aromatic acid or ester from the mother liquor; (d) crystallization of retained organic impurities from the mother liquor solution by flash crystallization to a pressure in a range downward from about one atmospheric to form a slurry of mother liquor solids; (e) recovery of mother liquor solids from the slurry; and (f) recycle of the recovered mother liquor solids to the depolymn. Terephthalic acid was recovered from a waste PET flake of clear beverage bottles.
IT **120-61-6P**, Dimethyl terephthalate
RL: IMF (Industrial manufacture); **PREP (Preparation)**
(recovery of aromatic acid or ester and polyol from waste polyester resins)
RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:491753 CAPLUS
DOCUMENT NUMBER: 117:91753
TITLE: Recovery of methyl esters of aromatic acids and glycols from thermoplastic polyester scrap using methanol vapor
INVENTOR(S): Michel, Robert Everette
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: Eur. Pat. Appl., 5 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

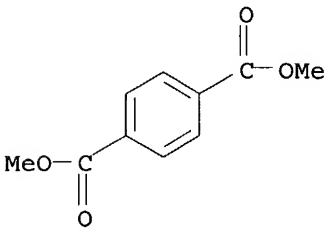
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 484963	A2	19920513	EP 1991-119061	19911108 <--
EP 484963	A3	19921021		
EP 484963	B1	19950719		
R: BE, DE, ES, FR, GB, IT, NL				
CA 2055066	AA	19920510	CA 1991-2055066	19911106 <--
JP 04316541	A2	19921106	JP 1991-318617	19911107 <--
JP 3237768	B2	20011210		
ES 2076444	T3	19951101	ES 1991-119061	19911108 <--

PRIORITY APPLN. INFO.: US 1990-610325 A 19901109
AB Me esters of aromatic acid,s e.g., di-Me terephthalate (I) and glycols are recovered from thermoplastic polyesters scrap by treating the polyester with MeOH vapor at >230° and pressure of 1-15 atm, continuously removing vapors of MeOH, I, and the glycol from the reactions, and separating

MeOH and I from the vapors. The depolymn. of combined green bottle waste [comprising 80% poly(ethylene terephthalate) and 20% high-d. polyethylene] with MeOH at 280° and 90 lb/in2 pressure gave I in 85% yield and ethyleneglycol in 88% yield (based on polyester content in the starting material).

IT **120-61-6P**, Dimethyl terephthalate
RL: **PREP (Preparation)**
(recovery of, from depolymd. polyester scrap)

RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



L17 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:209688 CAPLUS
DOCUMENT NUMBER: 94:209688
TITLE: Process for the recovery of dimethyl terephthalate from poly(ethylene terephthalate) waste
INVENTOR(S): Marathe, Madhav Narayan; Dabholkar, Dattaprasad Achut
PATENT ASSIGNEE(S): Padampat Research Centre, India
SOURCE: Brit. UK Pat. Appl., 5 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

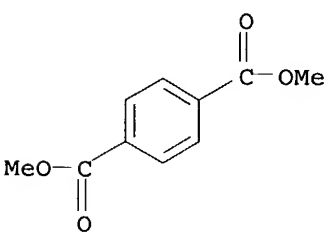
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2041916	A	19800917	GB 1979-4444	19790208 <--
GB 2041916	B2	19830413		

PRIORITY APPLN. INFO.: GB 1979-4444 19790208

AB The title process, which gives an improved yield of recovered di-Me terephthalate (I) [120-61-6] in a conventional high-pressure catalytic methanolysis reaction, includes use of a 2nd catalyst capable of converting the by-products into I. The 2nd catalyst, e.g. a transesterification catalyst, is added to the filtrate obtained after removing solid I from the primary reaction mixture Thus, poly(ethylene terephthalate) chips 100, MeOH 200, and Zn(OAc)2 0.4 g were heated 4.5 h at 180° and 20-1 kg/cm2. The cooled filtrate contained 11.2% p-MeO2CC6H4CO2(CH2)2OH [3645-00-9]. To 100 g filtrate was added 1 g Na2CO3 and the mixture was refluxed 2 h, cooled, and filtered to give 9.6 g I.

IT **120-61-6P**
RL: **PREP (Preparation)**
(recovery of, from poly(ethylene terephthalate) scrap, transesterification of by-products for improved yield in)

RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)

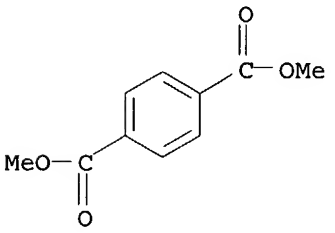


L17 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:602706 CAPLUS
DOCUMENT NUMBER: 87:202706
TITLE: Treatment of polyester wastes
AUTHOR(S): Chiang, Chia-Lin
CORPORATE SOURCE: Taiwan
SOURCE: Xinxianwei (**1977**), 19(1), 31-7, 49
CODEN: HHWEDF; ISSN: 0379-7244
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Waste poly(ethylene terephthalate) (I) [25038-59-9] was depolymd. in water or methanol to recover monomers. A mixture of 500 kg waste I and 1000 kg water was heated to 230° (28-9 atm), allowed to react for 2 h, cooled, and centrifuged to give 95% terephthalic acid [100-21-0]. Waste I and excess MeOH were heated at 180° (28 atm) for 5 h to prepare 91-3% di-Me terephthalate [120-61-6].

IT **120-61-6P**
RL: **PREP (Preparation)**
(manufacture of, from waste poly(ethylene terephthalate))

RN 120-61-6 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester (9CI) (CA INDEX NAME)



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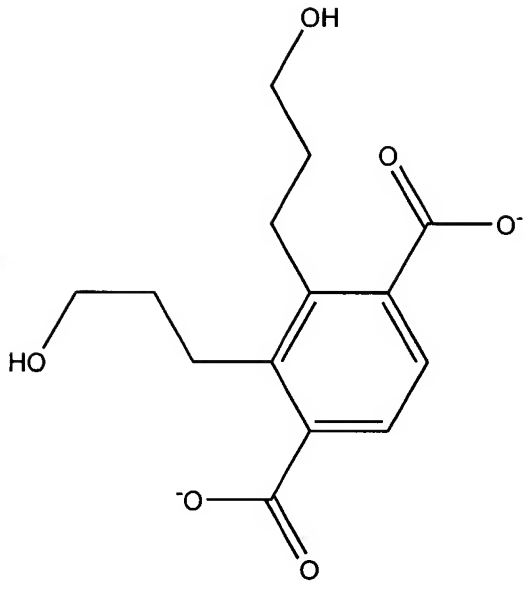
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